

EXHIBIT I

Wendy Thai

Subject: FW: [help #21742] RE: GROUP:Q9H5V8

Attachments: Wendy Thai.vcf

-----Original Message-----

From: Elisabeth Gasteiger via RT [<mailto:help@uniprot.org>]

Sent: Wednesday, June 20, 2007 4:15 AM

To: Wendy Thai

Subject: [help #21742] RE: GROUP:Q9H5V8

> [WThai@slwk.com - Wed Jun 20 00:25:32 2007]:
>
> Hi Elisabeth:
>
> Thank you for your help with this.
>
> I was told by an examiner at the US Patent and Trademark Office that the
> Scherl-Mostageer sequence had been corrected.
>
> Also, my sequence analysis data (see attached WORD document) indicates
> that the Scherl-Mostageer sequence has been changed in the database.
>
> For example, when I do an alignment of the original Scherl-Mostageer
> sequence with my sequence (SIMA135), I see two amino acid mismatches -
> at positions 525 and 827. See page 16 of the attached WORD document.
>
> However, when I do a blastp analysis of my sequence (SIMA135) against
> the database, I get 100 % identity with Q9H5V8. See page 1 of the
> attached WORD document. Q9H5V8 references the Scherl-Mostageer sequence
> (reference 1) - SEE pages 7-8 of attached WORD document.
>
> Thus, it appears as if the Scherl-Mostageer sequence had been changed
> and is now identical to SIMA135. Please advise. Am I misreading the
> sequence analysis results? If you think a telephone call would be
> helpful, let me know and I can call you.
>
> Thanks so much for your help.
>
> Wendy Thai
> 612-373-6913

Dear Wendy,

Thank you for these precisions.

The 2 mismatches are indeed reported in the UniProtKB/Swiss-Prot record.

The first one is a known variant:

FT VARIANT 525 525 R -> Q (in dbSNP:rs3749191).

FT /FTId=VAR_025498.

And the second is annotated as a sequencing conflict (ref.1 is the Scherl-Mostageer paper in the entry):

FT CONFLICT 827 827 S -> N (in Ref. 1, 3 and 5; BAB14695).

Your confusion is indeed caused by the fact that **Swiss-Prot is a non-redundant database that strives to have 1 protein entry for each gene product. When the sequence was manually annotated, the scientist who did the annotation saw that Q9H5V8 and Q96QU7 (the TrEMBL entry translated from the Scherl-Mostageer sequence AY026461) described the same protein although their sequences differed slightly (in 2 residues).**

And here is where the answer I gave you yesterday was not quite correct:
I said the sequences were 100% identical but indeed they are not.
Here is the entry history
<http://www.ebi.ac.uk/uniprot/unisave/?query=Q9H5V8&search=Go>

and here is the portion of our user manual which describes the concept
of minimal redundancy:
http://www.expasy.org/sprot/userman.html#what_is_sprot

In summary, the Scherl-Mostageer sequence has not changed since its
submission. It is just in the manually annotated Swiss-Prot database
that it has been considered to describe the same protein as the TrEMBL
sequence with which it was merged (note that this is an old version of
the Q9H5V8 entry from before the merge - it was in TrEMBL then and moved
to Swiss-Prot upon manual annotation):

ID Q9H5V8_HUMAN PRELIMINARY; PRT; 836 AA.
AC Q9H5V8;
DT 01-MAR-2001, integrated into UniProtKB/TrEMBL.
DT 01-MAR-2001, sequence version 1.
DT 07-FEB-2006, entry version 13.
DE Hypothetical protein FLJ22969 (NCSG135).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
OC Homo.
OX NCBI_TaxID=9606;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RA Watanabe K., Kumagai A., Itakura S., Yamazaki M., Tashiro H., Ota T.,
RA Suzuki Y., Obayashi M., Nishi T., Shibahara T., Tanaka T.,
RA Nakamura Y., Isogai T., Sugano S.;
RL Submitted (AUG-2000) to the EMBL/GenBank/DDBJ databases.
RN [2]
RP NUCLEOTIDE SEQUENCE.
RX MEDLINE=22547370; PubMed=12660814; DOI=10.1038/sj.onc.1206220;
RA Hooper J.D., Zijlstra A., Aimes R.T., Liang H., Claassen G.F.,
RA Tarin D., Testa J.E., Quigley J.P.;
RT "Subtractive immunization using highly metastatic human tumor cells
RT identifies SIMA135/CDGP1, a 135 kDa cell surface phosphorylated
RT glycoprotein antigen.";
RL Oncogene 22:1783-1794(2003).
CC -----
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CC -----
DR EMBL; AK026622; BAB15511.1; -; mRNA.
DR EMBL; AF468010; AAO33397.1; -; mRNA.
DR Ensembl; ENSG00000163814; Homo sapiens.
SQ SEQUENCE 836 AA; 92875 MW; 9B980475C3E5C4C8 CRC64;
MAGLNCGVSI ALLGVLLGA ARLPRGAEAF EIALPRESNI TVLIKLGTP TLLAKPCYIVI
SKRHITMLSI KSGERIVFTF SCQSPENHFV IEIQKNIDCM SGPCPFGEVQ LQPSTSLIPT
LNRTFIWDVK AHKSIGLELQ FSIPRLRQIG PGESCPDGV THSISGRIDAT VVRIGTFCSN
GTVSRIKMQE GVKMALHLPW FHPRNVSGFS IANRSSIKRL CIIESVFEGE GSATLMSANY
PEGFPEDELM TWQFVPAHL RASVSFLNFN LSNCRKEER VEYYPGSTT NPEVFKLEDK
QPGNMAGNFN LSLQGCDQDA QSPGILRLQF QVLVQHPQNE SNKIYVVDLS NERAMSLTIE
PRPVKQSRKF VPGCFVCLES RTCSSNLTLT SGSKHKISFL CDDLTRLWMN VEKTISCTDH
RYCQRKSYSL QVPSDILHLP VELHDFSWKL LVPKDRLSLV LVPAQKLQQH THEKPCNTSF
SYLVASAIPS QDLYFGSFCP GGSIKQIQVK QNISVTLRTF APSFRQEASR QGLTVSFIPI
FKEEGVFTVT PDKSKVYLR TPNWDRGLPS LTSVSWNISV PRDQVACLTF FKERSGVVCQ
TGRAFMIIQE QRTRAEIIFS LDEDVLPKPS FHHHSFWVNI SNCSPSTSGKQ LDLLFSVTLT
PRTVDLTVIL IAAVGGGVLL LSALGLIICC VKKKKKKTNK GPAVGIYNGN INTEMPRQPK
KFQKGRKDND SHVYAVIEDT MUYGHLLQDS SGSFLQPEVD TYRPFQGTMG VCPPSPPTIC
SRAPTAKLAT EEPSPSPPE SESEPYTFSH PNNGDVSSKD TDIPLLSTQE PMEPAE

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I hope this helps.

Best regards
Elisabeth Gasteiger

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Wendy Thai.vcf
(182 B)
